

Why PadoBiom®?



Detect dysbiosis early on,
introduce prophylaxis measures.



Stop periodontitis,
by switching to the therapy
phase in good time.



Identify risk patients with progression,
ensure **adjuvant (antibiotic) therapy**

The new method for evaluating the gingival sulcus

Order your **PadoBiom® sampling set** now:

Free hotline

00800 32 32 62 62

Web

www.padobiom.de/en | www.iai-test.de/en

Sales

DE, EU & world: ParoX GmbH | Deutscher Platz 5, 04103 Leipzig, Germany | Tel.: +49 341 149 59 10 | Fax: +49 341 149 59 59

CH: Institut für Angewandte Immunologie IAI AG | Dorfstr. 4, 8132 Egg b. Zürich, Switzerland | Tel.: +41 326 855 462 | Fax: +41 326 855 492

Literature

Abusleme, L.; Dupuy, A.K.; Dutzan, N.; Silva, N.; Burleson, J.A.; Strausbaugh, L.D.; Gamonal, J.; Diaz, P.I. (2013): The subgingival microbiome in health and periodontitis and its relationship with community biomass and inflammation. *The ISME Journal*, 7: 1016–1025.

Columbo, A.P.V.; Tanner, A.C.R. (2019): The Role of Bacterial Biofilms in Dental Caries and Periodontal and Peri-implant Diseases: A Historical Perspective. *Journal of Dental Research*, 98: 373–385.

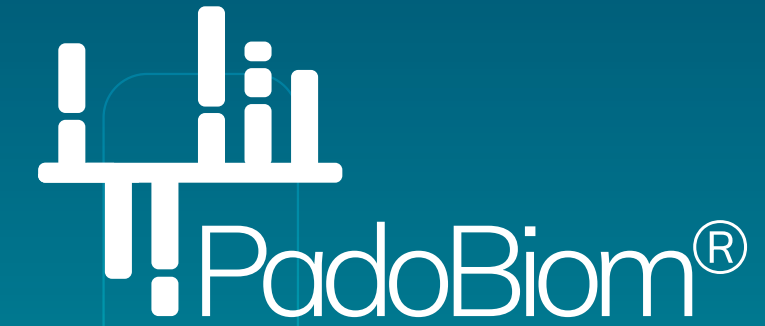
Diaz, P.I.; Hoare, A.; Hong, B.Y. (2016): Subgingival microbiome shifts and community dynamics in periodontal diseases. *CDA Journal*, 44 (7): 421 – 435.

Hagenfeld, D.; Ehmke, B.; Prior, K. (2021): Das parodontalpathogene Mikrobiom bei Parodontitispatienten. *ZM*, 01-02: 44-49.

Hajishengallis, G.; Lamont, R.J. (2021): Polymicrobial communities in periodontal disease: their quasi-organismal nature and dialogue with the host. *Periodontol 2000*, 86(1): 210–230.

Hong, B.Y.; Furtado Araujo, M.; Strausbaugh, L.D.; Terzi, E.; Ioannidou, E.; Diaz, P.I. (2015): Microbiome Profiles in Periodontitis in Relation to Host and Disease Characteristics. *PLoS ONE*, 10(5): e0127077.

Kilian, M.; Chapple, I.L.C.; Hannig, M.; Marsh, P.D.; Meuric, V.; Pedersen, A.M.L.; Tonetti, M.S.; Wade, W.G.; Zaura, E.; (2016): The oral microbiome – an update for oral healthcare professionals. *British Dental Journal*, 221: 657–666.



For evaluating the gingival sulcus

Microbiome-based analysis prior to and during periodontitis

Knowledge for dentists

PadoBiom® analyses and evaluates the periodontal microbiome and its equilibrium by means of next-generation sequencing. In contrast to the examination of individual pathogenic bacteria, this method enables the comprehensive and early assessment of developing periodontitis.

The dysbiosis index, the **identification of risk patients**, the evaluation of key parameters and the examination of antibiotic resistance genes lead to outcome recommendations that optimise the treatment timing and treatment planning of every dental practice.

Gain the crucial advantage

- + Diagnostics as a mark of quality**
- + Diagnostics for patient binding**
- + Diagnostics for patient satisfaction**

- + Early detection of symptoms
- + Individually adapted therapy
- + Patient binding in prophylaxis
- + Practically-oriented outcome therapy
- + Risk of progression as a decision-making aid for adjuvant (antibiotic) therapy

- + Increasing adherence
- + Argument for increasing the frequency of PDC
- + Long-term monitoring
- + Decision in borderline cases
- + Differential diagnostics
- + Determining treatment timing



www.iai-test.de

Examination for the health of the gingival sulcus

Dysbiosis index and risk of progression *Early detection prior to periodontitis and identification of risk patients*

Assessment of symbiosis / dysbiosis
The ratio of health- and disease-related bacteria results in the dysbiosis index of the oral microbiome.

Identification of risk of progression
The identification of the deviating microbial load in the statistical comparison enables the targeted therapy of risk patients.

Key parameters *For an extended assessment*

Evaluation of richness
The lower the microbial species diversity, the healthier the oral microbiome.

Evaluation of evenness
The frequency of individual bacteria enables an evaluation of balance.

Evaluation of pathogenicity
The identification of indicator bacteria for classifying pathogenicity in the oral microbiome.

Determination of Aa serotypes
Detection of *Aggregatibacter actinomycetemcomitans* a - f and the JP2 clone in the subgingival flora for individual antibiotic therapy.

Antibiotic resistance genes *Bacterially induced therapy failure*

Beta-Lactams	Nitroimidazoles	Tetracyclines	Chinolones	Makrolides
Positive	Negative	Negative	Negative	Positive

Existing **antibiotic resistance genes** from five dentally-relevant antibiotic classes as information for optimised antibiotic therapy.

Illustrations are symbolic

Decision for practically-oriented outcome recommendations



- The outcome recommendation takes the form of classification into one of three practically-oriented categories with measures from the familiar dental treatment spectrum.
- For the first time, this enables you to decide which patients need to proceed from the check-up phase to the prophylaxis phase or from here to the therapy phase.**
- This increases the success of treatment and, if diagnosis is carried out early on, additionally prevents the necessity of therapy.

www.padobiom.de/en

